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ENVIRONMENTAL ASSESSMENT  
RELOCATE RIDING STABLES  
ELMENDORF AIR FORCE BASE  
ALASKA

3rd Civil Engineer Squadron  
6326 Arctic Warrior Drive  
Elmendorf Air Force Base, Alaska

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## FINDING OF NO SIGNIFICANT IMPACT (FONSI)

### FOR

### RELOCATE RIDING STABLES

### ELMENDORF AIR FORCE BASE

### ALASKA

**INTRODUCTION:** The purpose of this proposal is to relocate the Elmendorf Riding Stables to a location near the Hillberg Ski Area. The Elmendorf Riding Stables, in operation since 1959, provides a quality service operation to all active duty, reserve and guard service members, retirees, Department of Defense civilians, and their dependents. Such recreational opportunities contribute to the morale and welfare of base personnel. The present riding stables are located on Truemper Loop off of Arctic Warrior Drive, Elmendorf Air Force Base, Alaska. The area in which the riding stables are currently located is under development for the construction of a new fuel cell maintenance facility for fighter jet aircraft and the future beddown of F-22 aircraft, in support of the 3rd Wing mission.

**DESCRIPTION OF THE PROPOSED ACTION:** Construction would include the clearing and leveling of five acres for the construction of a stall barn, to include 22-12' x 12' stalls, one tack room, one office, 1 supply/equipment room, and one bathroom; fencing for 22-12' x 24' runs (paddocks); one hay storage area; water well and septic system; and 1000' feet of underground electrical to connect to an existing power source. Propane heating would be provided for the bathroom, tack room and office area.

### ALTERNATIVES CONSIDERED:

**Alternative No. 1:** Relocate the riding stables to a location south of the Marine Corps facility on the Elmendorf/Fort Richardson boundary, north of the Davis Highway. This location is also being evaluated for the future expansion of the 3rd Civil Engineering gravel pit west of the proposed site. The Marine Corps also uses this area for training purposes.

**Alternative No. 2:** Relocate the riding stables to a location near the Defense Reutilization and Marketing Office (DRMO) facility at the corner of Vandenberg Avenue and Davis Highway. Recent evaluation of this area has noted the presence of trash cells and soil contamination, and investigation continues in this area.

**Alternative No. 3 - No Action Alternative:** Maintain the riding stables at the current location on Truemper Loop off Arctic Warrior Drive. A service of this type is no longer compatible with the land designations in the area. The area is currently under development for the introduction of F-22 fighter aircraft to the 3rd Wing Mission. As a result, the riding stables will need to be relocated, or operations of the center will have to cease. Failure to relocate the riding stables to a new location would prevent this recreational opportunity from existing for the benefit of the morale and welfare of base personnel.



## ANALYSIS OF AFFECTED ENVIRONMENT:

**Air Quality:** The proposed action and alternatives would have no long-term, significant impact on air quality. There would be some fugitive dust generated during the course of the project, particularly if dry weather is encountered. The fugitive dust would be temporary in nature, lasting only for the duration of the project.

**Water Resources:** The proposed action and alternatives would not have any significant impact on water quality. Elmendorf will coordinate with the State of Alaska, Alaska Department of Environmental Conservation, regarding the plan review and approval of the proposed installation of a domestic water well and septic system. Wellhead protection for the existing drinking water well at Hillberg will be addressed.

**Threatened and Endangered Species:** There are no threatened or endangered species on Elmendorf. The Cook Inlet beluga whale is listed as a depleted species under the Marine Mammal Protection Act. Thus far, there has been no "essential habitat" identified in the vicinity of the mouths of any Elmendorf streams.

**Vegetation Resources:** The proposed action, as well as the other alternatives, would have no significant impact on the overall vegetation composition of the base.

**Fish and Wildlife Habitat:** The proposed action and alternatives could have a negative impact on several species of mammals, specifically black and brown bears and moose. The tendency of penned horses and equine foods to attract bears is likely to create future conflicts that may result in injury or death of a bear and/or horse. If the conflict involves a brown bear, and requires the destruction of the bear, this could have a major impact on local brown bear populations in the area, due to their relatively low numbers. However, this would not have an impact on regional brown bear populations. Loss of a black bear would be a negative impact, but not as major as for a brown bear, due to their larger population numbers. Good housekeeping and sanitation around the stables should be aggressively enforced to minimize bear problems. Monitoring of this potential conflict will be accomplished and evaluated over time. The proposed action and alternatives would have no significant impact on waterfowl populations, neo-tropical migrants, or overall diversity of wildlife on Elmendorf or the surrounding area. The proposed action and alternatives will eliminate forest habitat for black bears and moose and smaller mammals but not at a significant level.

**Historic and Cultural Resources:** The proposed action and alternatives would have no significant effect on any known cultural or historic resources. The probability of an unknown site being discovered in the area of the proposed action and alternatives is low. If any indication of cultural or historical resources were to be discovered during construction, all work would stop and would not proceed until thoroughly evaluated.

**Outdoor Recreation:** The proposed action will necessitate the reorganization of trail uses on base. The trail leaving the proposed site is currently available to all-terrain vehicle (ATV) and snowmachine use, which will conflict with horseback riding. There is also a potential conflict with special



archery hunters in the area of the proposed action. The alternatives would have no additional impact to current outdoor recreational uses.

**Land Status:** The proposed action and alternatives would not alter land status on Elmendorf.

**Remedial Investigations:** None of the alternatives would create an adverse impact on remedial investigations or actions on Elmendorf.

**Environmental Restoration Program:** In 2002, a range survey was completed to document active, inactive, and closed military firing ranges on Elmendorf. Results of the inventory indicate a suspected skeet range located near the Hillberg Ski Area, approximately 500 feet north of the northeast corner of Hillberg Lake, east of the ski area's parking lot. The approximate area of the range is 1.1 acres. According to a 1944 (with shown revisions dated to 1949) plat map, the Hillberg Lake area was a designated recreation area with a skeet range. It is unknown if this skeet range was ever constructed. Aerial photographs were examined, and interviews were conducted, to corroborate the 1944 plat map, however none were successful. A site investigation is planned for the year 2006, to determine if the skeet range did, in fact, exist. The location of the suspected skeet range is not in the immediate location of the proposed riding stables, and no impact is expected to occur.

**Environmental Compliance Contaminated Sites Program:** In October 1988, a release of petroleum product occurred at the Hillberg Ski Area. The spill is believed to have occurred from the fueling hose/nozzle of a 300-gallon aboveground storage tank located adjacent to the ski area maintenance facility, approximately 80 yards north of Hillberg Lake. Approximately 180 gallons of fuel siphoned from the hose into the ground when a fill hose was discovered on the ground next to the tank. Approximately 150 cubic yards of contaminated soil was excavated and removed from the area of the release, and a groundwater monitoring well was installed downgradient between the release site and Hillberg Lake. The groundwater is currently monitored for the presence of contaminants. The location of the spill site is not in the immediate vicinity of the proposed riding stables, and no impact is expected to occur. The proposed action would require provisions if soil contamination is encountered at the project site.

**Air Force Mission:** The proposed action has a positive effect on the base mission, due to the construction of a new fuel cell maintenance facility for fighter jet aircraft, and the future introduction of the F-22 fighter jet and its capabilities to the 3<sup>rd</sup> Wing mission.

**CUMULATIVE ENVIRONMENTAL IMPACTS:** Implementation of the proposed action is not expected to contribute to cumulative adverse environmental impacts at Elmendorf. However, the loss of cover habitat for moose and bears caused by the proposed action and alternative 1 do add to a growing reduction of forested habitat and the species of wildlife that associate with these forest types.

**Wildlife Impacts:** The impact to bears caused by the location of the stables at the Hillberg site may be negative. It is not possible to predict how much of a cumulative impact this action will have, but the conflicts that arise between bears and horse owners will be monitored over time.

**Base Conservation Enforcement/Security Forces:** Patrols through the area of the proposed action are random for both the Military Conservation Agents and security forces; therefore reducing the amount of security coverage the stables has enjoyed at its current location, as well as the amount of coverage that would be received at alternatives 1 and 2. Also, nuisance wildlife conflicts with the stables and the horses will increase at the proposed action site, causing further stress on the horses. The remoteness of the proposed action increases the response time for preventing potential conflicts, relegating the Military Conservation Agent's reacting to after-the-fact incidents.

**CONCLUSION:** Based upon the attached environmental assessment, conducted in accordance with the requirements of the National Environmental Policy Act, the Council on Environmental Quality Regulations, and Air Force Instruction 32-7061, it is concluded that the proposed action, to relocate the Elmendorf Air Force Base riding stables to a location near the Hillberg Ski Area, would have no significant individual or cumulative adverse impacts upon the environment. An environmental impact statement is not required.

**DECISION:** Based on the alternatives considered, the proposed action is the alternative of choice.

19 AUG 03  
DATE

  
DOUGLAS L. MILLER, Colonel, USAF  
Vice Commander

**TABLE OF CONTENTS**  
**RELOCATE RIDING STABLES**

	<u>Page No.</u>
Section 1.0 Background	1
Section 2.0 Description of the Proposed Action and Alternatives	2
Section 3.0 Affected Environment	2
Section 4.0 Environmental Consequences	6
Section 5.0 Cumulative Impacts	8
Section 6.0 List of Persons and Agencies Contacted	9
Figure 1 Location of the Proposed Action and Alternatives	
Figure 2 Proposed Action Site Map	
Appendix A Finding of No Significant Impact	



## ENVIRONMENTAL ASSESSMENT

### RELOCATE RIDING STABLES

#### ELMENDORF AIR FORCE BASE, ALASKA

## 1.0 BACKGROUND

**1.1 Purpose and Need:** The purpose of this proposal is to relocate the Elmendorf Riding Stables to a location near the Hillberg Ski Area. The Elmendorf Riding Stables, in operation since 1959, provides a quality service operation to all active duty, reserve and guard service members, retirees, Department of Defense civilians, and their dependents. Such recreational opportunities contribute to the morale and welfare of base personnel. The present riding stables are located on Truemper Loop off of Arctic Warrior Drive, Elmendorf Air Force Base, Alaska. The area in which the riding stables are currently located is under development for the construction of a new fuel cell maintenance facility for fighter jet aircraft and the future beddown of F-22 aircraft, in support of the 3rd Wing mission.

**1.2 Location of the Proposed Action:** Near the Hillberg Ski Area, on 41<sup>st</sup> Street, Elmendorf Air Force Base, Alaska.

### 1.3 Previous Environmental Documentation Reviewed:

**1.3.1** Close Pond West of East-West Runway Environmental Assessment/Finding of No Significant Impact (1999)

**1.3.2** Draft Hillberg First Aid Facility Environmental Assessment/Finding of No Significant Impact (1995)

**1.3.3** Environmental Restoration Program, Management Action Plan, Revision No. 5, Final (Dec 2001)

**1.3.4** Environmental Restoration Program, Range Survey Summary (2002)

**1.3.5** SERA VII Release Investigation, Hillberg Ski Area (1998)

**1.4 Regulatory Coordination:** Elmendorf will need to coordinate with the State of Alaska, Alaska Department of Environmental Conservation, regarding the plan review and approval of the proposed installation of a domestic water well and septic system. Wellhead protection for the existing drinking water well at Hillberg will need to be addressed.



## 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

**2.1 Proposed Action:** Construction would include the clearing and leveling of five acres for the construction of a stall barn, to include 22-12' x 12' stalls, one tack room, one office, one supply/equipment room, and one bathroom; fencing for 22-12' x 24' runs (paddocks); one hay storage area; water well and septic system; and 1000' feet of underground electrical to connect to an existing power source. Propane heating would be provided for the bathroom, tack room and office area.

**2.2 Alternative No. 1:** Relocate the riding stables to a location south of the Marine Corps facility on the Elmendorf/Fort Richardson boundary, north of the Davis Highway.

**2.3 Alternative No. 2:** Relocate the riding stables to a location near the Defense Reutilization and Marketing Office (DRMO) facility at the corner of Vandenberg Avenue and Davis Highway.

**2.4 No Action Alternative:** Maintain the riding stables at the current location on Truemper Loop off Arctic Warrior Drive.

**3.0 AFFECTED ENVIRONMENT:** Elmendorf is located in south-central Alaska at the head of Cook Inlet. The base is bordered to the south by downtown Anchorage, the east by Fort Richardson Army Reservation, and to the north and west by the Knik Arm of Cook Inlet. Elmendorf covers 13,103 acres of land, with approximately 4,100 acres classified as improved and semi-improved. The remaining acreage is considered undeveloped.

**3.1 Air Quality:** Elmendorf is located adjacent to the Anchorage non-attainment zone for carbon monoxide. The southern boundary of EAFB is the northern boundary of the non-attainment zone. The Anchorage area is unclassified for all other National Ambient Air Quality Standards. Emissions sources on Elmendorf are operated in accordance with state Air Quality Control regulations and include operating permits and operational limits.

**3.2 Water Resources:** Eleven natural ponds and lakes, as well as two man-made lakes and two cooling ponds are found on Elmendorf. Of the natural ponds, only one is drained by a stream which is only active during breakup and periods of heavy rain. Drainage from other ponds, formed in depressions left by melting glacial ice, is entirely subsurface, with percolation down through the soil. The man-made lakes are impoundments along Six-Mile Creek and are spring fed. Ship Creek is a major stream originating in the Chugach Mountains and flows along the southern boundary of the base. Elmendorf's potable water supply comes from the upper reaches of Ship Creek. The water is treated at the Fort Richardson water treatment plant prior to distribution on base. The base distribution system includes a two million gallon storage reservoir that would supply potable water in the event regular service is disrupted. In the undeveloped portions of the base (north of the Elmendorf Moraine), groundwater is used to provide drinking water for recreational and other facilities. Elmendorf has approximately 1,592 acres of wetlands, scattered across the base. A majority of the wetlands are concentrated along the three stream drainages. Wetlands have also formed in kettle depressions. These wetlands form marshes, bogs, natural ponds, and lakes. The wetlands serve several functions, including providing valuable habitat to a wide variety of wildlife species.



**3.3 Threatened or Endangered Species:** There are no threatened or endangered plants, fish, or wildlife on Elmendorf, nor is any critical habitat designated. Recently, the Cook Inlet beluga whale was listed as a depleted species under the Marine Mammal Protection Act, as amended. Thus far, there has been no "essential habitat" identified for the beluga whale in the vicinity of the mouths of any Elmendorf streams.

**3.4 Vegetation Resources:** Vegetation covers approximately 96 percent of the undeveloped portions (8,600 acres) of Elmendorf. The remaining four percent is open water or tidal flats. Of the 476 vascular plant species found in the Anchorage area, only 221 are known to occur on Elmendorf. There are three distinct plant communities: forest/woodlands, shrub alder thickets, and wetlands. Forest/woodlands is the dominant community on base.

**3.4.1 Proposed Action Site:** Open black spruce forest and open mixed white spruce-paper birch are two species cover types within the area affected by the proposed action. Generally, these stands range in age from 75 to over 200 years old, with ground cover dominated by horsetail, mosses, bunchberry dogwood, Labrador tea, and wintergreen. Previously disturbed sites of gravel extraction on the SE corner of the area and the overgrown graded trails that meander east to west are identifiable by alder growth. The understory of this plant community is moss and ferns. The project site has no wetlands within its boundary, but two wetland areas can be found to the west and south.

**3.4.2 Alternative 1:** The site north of the Davis Highway is closed canopy spruce forest with occasional aspen and paper birch. The understory is composed of horsetail, Labrador tea, mosses, fern, and bunchberry dogwood. Young spruce, bebb willow and birch and aspen saplings are also present in the understory.

**3.4.3 Alternative 2:** The DRMO site is predominately in gravel, grasses, and poplar and alder saplings.

### **3.5 Fish and Wildlife:**

**3.5.1 Birds:** Approximately 97 species of birds can be found on Elmendorf during various times of the year. The occurrence of 37 species is considered rare, 26 are uncommon, 23 are common, and 11 are abundant. Terrestrial birds account for 62 of the 97 species and yellow-rumped warblers are the most common species. Bald eagles and the great-horned owl are found year round on Elmendorf. The terrestrial species typically use the forested areas for feeding and nesting. Water birds (ducks, geese, and loons) and shore birds are found in lakes, streams, wetlands, and other open water areas. Only 14 of the 97 species of birds can be found on Elmendorf during the winter months.

The dominant black spruce forest at the proposed site and alternative 1 site is preferred by species such as boreal chickadee, gray jay, spruce grouse, northern saw-whet owl, ruby crowned kinglet, yellow-rumped warbler, and dark-eyed junco. The open space of the DRMO attracts semi-palmated plovers and provides feeding area for American robins, swallows, and black-billed magpies.



**3.5.2 Mammals:** Approximately 40 terrestrial mammals are known to be present in the Anchorage bowl. Of these 40 species, only 18 have been documented on Elmendorf. Suitable habitat exists for all of the remaining species. The largest mammal found on Elmendorf is the moose, which makes use of all the plant communities at some point during the year. Moose use dense black spruce forest as cover habitat when being pursued by predators/hunters. The moose population ranges between 70 and 120 animals, depending on the time of year. The northern portion of the base is a major calving area for the Fort Richardson/Elmendorf moose herd. The base is also home to a population of 15 to 30 black bears. Coyotes, foxes, and a few brown bears are also residents of the base. At least two wolf packs include portions of Elmendorf in their territories. The ponds, lakes, and streams provide habitat for mink, river otter, beaver and muskrat. The populations of beavers and muskrats are considered abundant and, at times, must be trapped to prevent damage to base facilities (roads, bridges, etc.). The Cook Inlet beluga whale frequents the waters adjacent to the installation. These whales feed on the base's salmon run which are relatively small in scale compared with other runs in upper Cook Inlet.

**3.5.3 Fish:** All five of the Pacific salmon species are known to return to base streams to spawn. Ship Creek has enhanced runs of king and silver salmon, with natural returns of chum and pink salmon. Some red salmon have been reported in Ship Creek, but these reports have only included males and only two or three each year. Since there are no red salmon rearing areas on Ship Creek, these are believed to be pioneer specimens. Salmon return to the creek beginning in early June and are usually gone by late September. Ship Creek also has a population of rainbow trout, but they are not very abundant on the base portion of the stream, due to a lack of rearing habitat. Rainbow trout feed on insects, freshwater shrimp, and small fish, to include trout, salmon, and sticklebacks. Young trout and salmon make use of weedy shoreline areas to hide from large trout. Six-Mile Creek has natural runs of all Pacific salmon, rainbow trout and arctic char. The nearest water bodies to the proposed site are Hillberg, Spring and Green Lakes. All three lakes are stocked by Alaska Department of Fish and Game with rainbow trout and Chinook salmon. Ship Creek is the nearest water body to the alternative sites. The nearest stretch of the creek to these sites are above the dam that blocks the return of most salmon.

**3.6 Historic and Cultural Resources:** Elmendorf AFB is a World War II and Cold War Era installation containing three historic districts that have been identified as eligible for the National Register of Historic Places: General's Quad, Flight Line, and Alaska Air Depot. As many as six Cold War Era structures may eventually be determined eligible for the Register, but at this time the eligibility determinations have not been completed. There are 12 potentially eligible archaeological sites identified on base. They are mostly identified as native fishing camp sites used within the past 100 years. None of the homestead-era remaining portions of buildings or sites retain enough integrity to be eligible for the National Register.



**3.7 Outdoor Recreation:** Outdoor recreation opportunities on Elmendorf include moose hunting by bow and arrow, fishing on base lakes, and downhill skiing on Hillberg ski slope. The base trail system provides hiking, cross-country skiing, horseback riding, snow machining and All-terrain vehicle (ATV) use. Some trails are managed for multiple use but, due to inherent conflicts between motorized and non-motorized uses, some trails are restricted in use. As a result ATV users are most restricted and are allowed on only one trail.

**3.8 Land Status:** The Air Force has implemented an Air Installation Compatibility Use Zone Program (AICUZ) to aid in identifying land use constraints for future development. These zones restrict the placement of residential, commercial and other incompatible land uses, limiting the land available for intensive development. Essential land uses are designated on Elmendorf to support the flying mission. Runways, taxiways, and support facilities have specific safety and setback requirements. Military aircraft flight patterns also generate specific approach, departure, and noise zones. Land use is also constrained by required explosive safety zones around munitions storage areas and electromagnetic compatibility zones around communications facilities.

**3.9 Remedial Investigations:** Air Force remedial investigations are conducted to address environmental contamination under two programs:

**3.91 Environmental Restoration Program:** The Air Forces Environmental Restoration Program (ERP) was developed to address environmental contamination resulting from past waste disposal practices and spilled contaminants. The ERP includes all Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) activities conducted under the Federal Facilities Agreement (FFA).

**3.9.2 Environmental Compliance Contaminated Sites Program:** The Environmental Compliance Contaminated Sites Program (ECCS) addresses environmental contamination sites not covered under the ERP. The ECCS conducts remedial actions on contaminated sites under the authority of 18 AAC 75 and 18 AAC 78.

**3.10 Air Force Mission:** The mission of the 3rd Wing is to support and defend United States' interests in the Asia Pacific region and around the world by providing military units who are ready for worldwide air power projection and a base that is capable of meeting the Pacific Command's theater staging and throughput requirements.

FILE: 2A-1  
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**4.0 ENVIRONMENTAL CONSEQUENCES:** Table 1 summarizes the potential effects of each alternative and provides a comparison of impacts between the Proposed Alternative, Alternative No. 1, Alternative No. 2, and the No-Action Alternative.

**TABLE 1  
 EVALUATION OF ALTERNATIVES**

	PROPOSED ACTION	ALT No. 1	ALT No. 2	NO ACTION ALTERNATIVE
AIR QUALITY (Emissions, attainment status, state implementation plan, etc)	-	-	-	0
WATER RESOURCES (Quality, quantity, source, wetlands, etc.)	-	-	-	0
THREATENED AND ENDANGERED SPECIES	0	0	0	0
VEGETATION RESOURCES	0	0	0	0
FISH AND WILDLIFE (Birds, mammals, and fish)	-	-	-	0
CULTURAL RESOURCES (archaeological, historical, etc.)	0	0	0	0
OUTDOOR RECREATION	-	0	0	0
LAND STATUS (AICUZ, APZ, ESZ, ECPZ)	0	0	0	0
REMEDIAL INVESTIGATIONS	0	0	0	0
AIR FORCE MISSION	+	+	+	-

(+ = positive effect; 0= no effect; - = adverse effect;)

**4.1 Air Quality:** The proposed action and alternatives would have no long-term, significant impact on air quality. There would be some fugitive dust generated during the course of the project, particularly if dry weather is encountered. The fugitive dust would be temporary in nature, lasting only for the duration of the project.

**4.2 Water Resources:** The proposed action and alternatives would not have any significant impact on water quality. Elmendorf will coordinate with the State of Alaska, Alaska Department of Environmental Conservation, regarding the plan review and approval of the proposed installation of a domestic water well and septic system. Wellhead protection for the existing drinking water well at Hillberg will be addressed.



**4.3 Threatened and Endangered Species:** There are no threatened or endangered species on Elmendorf. The Cook Inlet beluga whale is listed as a depleted species under the Marine Mammal Protection Act. Thus far, there has been no "essential habitat" identified in the vicinity of the mouths of any Elmendorf streams.

**4.4 Vegetation Resources:** The proposed action, as well as the other alternatives would have no significant impact on the overall vegetation composition of the base.

**4.5 Fish and Wildlife Habitat:** The proposed action and alternatives could have a negative impact on several species of mammals, specifically black and brown bears and moose. The tendency of penned horses and equine foods to attract bears is likely to create future conflicts that may result in injury or death of a bear and/or horse. If the conflict involves a brown bear, and requires the destruction of the bear, this could have a major impact on local brown bear populations in the area, due to their relatively low numbers. However, this would not have an impact on regional brown bear populations. Loss of a black bear would be a negative impact, but not as major as for a brown bear, due to their larger population numbers. Good housekeeping and sanitation around the stables should be aggressively enforced to minimize bear problems. Monitoring of this potential conflict will be accomplished and evaluated over time. The proposed action and alternatives would have no significant impact on waterfowl populations, neo-tropical migrants, or overall diversity of wildlife on Elmendorf or the surrounding area. The proposed action and alternatives will eliminate forest habitat for black bears and moose and smaller mammals but not at a significant level.

**4.6 Historic and Cultural Resources:** The proposed action and alternatives would have no significant effect on any known cultural or historic resources. The probability of an unknown site being discovered in the area of the proposed action and alternatives is low. If any indication of cultural or historical resources were to be discovered during construction, all work would stop and would not proceed until thoroughly evaluated.

**4.7 Outdoor Recreation:** The proposed action will necessitate the reorganization of trail uses on base. The trail leaving the proposed site is currently available to all-terrain vehicle (ATV) and snowmachine use, which will conflict with horseback riding. There is also a potential conflict with special archery hunters in the area of the proposed action. The alternatives would have no additional impact to current outdoor recreational uses.

**4.8 Land Status:** The proposed action and alternatives would not alter land status on Elmendorf.

**4.9 Remedial Investigations:** None of the alternatives would create an adverse impact on remedial investigations or actions on Elmendorf.



**4.9.1 Environmental Restoration Program:** In 2002, a range survey was completed to document active, inactive, and closed military firing ranges on Elmendorf. Results of the inventory indicate a suspected skeet range located near the Hillberg Ski Area, approximately 500 feet north of the northeast corner of Hillberg Lake, east of the ski area's parking lot. The approximate area of the range is 1.1 acres. According to a 1944 (with shown revisions dated to 1949) plat map, the Hillberg Lake area was a designated recreation area with a skeet range. It is unknown if this skeet range was ever constructed. Aerial photographs were examined, and interviews were conducted, to corroborate the 1944 plat map, however none were successful. A site investigation is planned for the year 2006, to determine if the skeet range did, in fact, exist. The location of the suspected skeet range is not in the immediate location of the proposed riding stables, and no impact is expected to occur.

**4.9.2 Environmental Compliance Contaminated Sites Program:** In October 1988, a release of petroleum product occurred at the Hillberg Ski Area. The spill is believed to have occurred from the fueling hose/nozzle of a 300-gallon aboveground storage tank located adjacent to the ski area maintenance facility, approximately 80 yards north of Hillberg Lake. Approximately 180 gallons of fuel siphoned from the hose into the ground when a fill hose was discovered on the ground next to the tank. Approximately 150 cubic yards of contaminated soil was excavated and removed from the area of the release, and a groundwater monitoring well was installed downgradient between the release site and Hillberg Lake. The groundwater is currently monitored for the presence of contaminants. The location of the spill site is not in the immediate vicinity of the proposed riding stables, and no impact is expected to occur. The proposed action would require provisions if soil contamination is encountered at the project site.

**4.10 Air Force Mission:** The proposed action has a positive effect on the base mission, due to the construction of a new fuel cell maintenance facility for fighter jet aircraft, and the future introduction of the F-22 fighter jet and its capabilities to the 3<sup>rd</sup> Wing mission.

**5.0 CUMULATIVE IMPACTS:** Implementation of the proposed action is not expected to contribute to cumulative adverse environmental impacts at Elmendorf. However, the loss of cover habitat for moose and bears caused by the proposed action and alternative 1 do add to a growing reduction of forested habitat and the species of wildlife that associate with these forest types.

**5.1 Wildlife Impacts:** The impact to bears caused by the location of the stables at the Hillberg site may be negative. It is not possible to predict how much of a cumulative impact this action will have, but the conflicts that arise between bears and horse owners will be monitored over time.

**5.2 Base Conservation Enforcement/Security Forces:** Patrols through the area of the proposed action are random for both the Military Conservation Agents and security forces; therefore reducing the amount of security coverage the stables has enjoyed at its current location, as well as the amount of coverage that would be received at alternatives 1 and 2. Also, nuisance wildlife conflicts with the stables and the horses will increase at the proposed action site, causing further stress on the horses. The remoteness of the proposed action increases the response time for preventing potential conflicts, relegating the Military Conservation Agent's reacting to after-the-fact incidents.

**6.0 LIST OF PERSONS AND AGENCIES CONTACTED:**

United States Air Force, 3<sup>rd</sup> Civil Engineering

Paula Fowler, 3 CES/CEVQ

John Mahaffey, 3 CES/CEVQ

Joe Williamson, 3 CES/CEVR

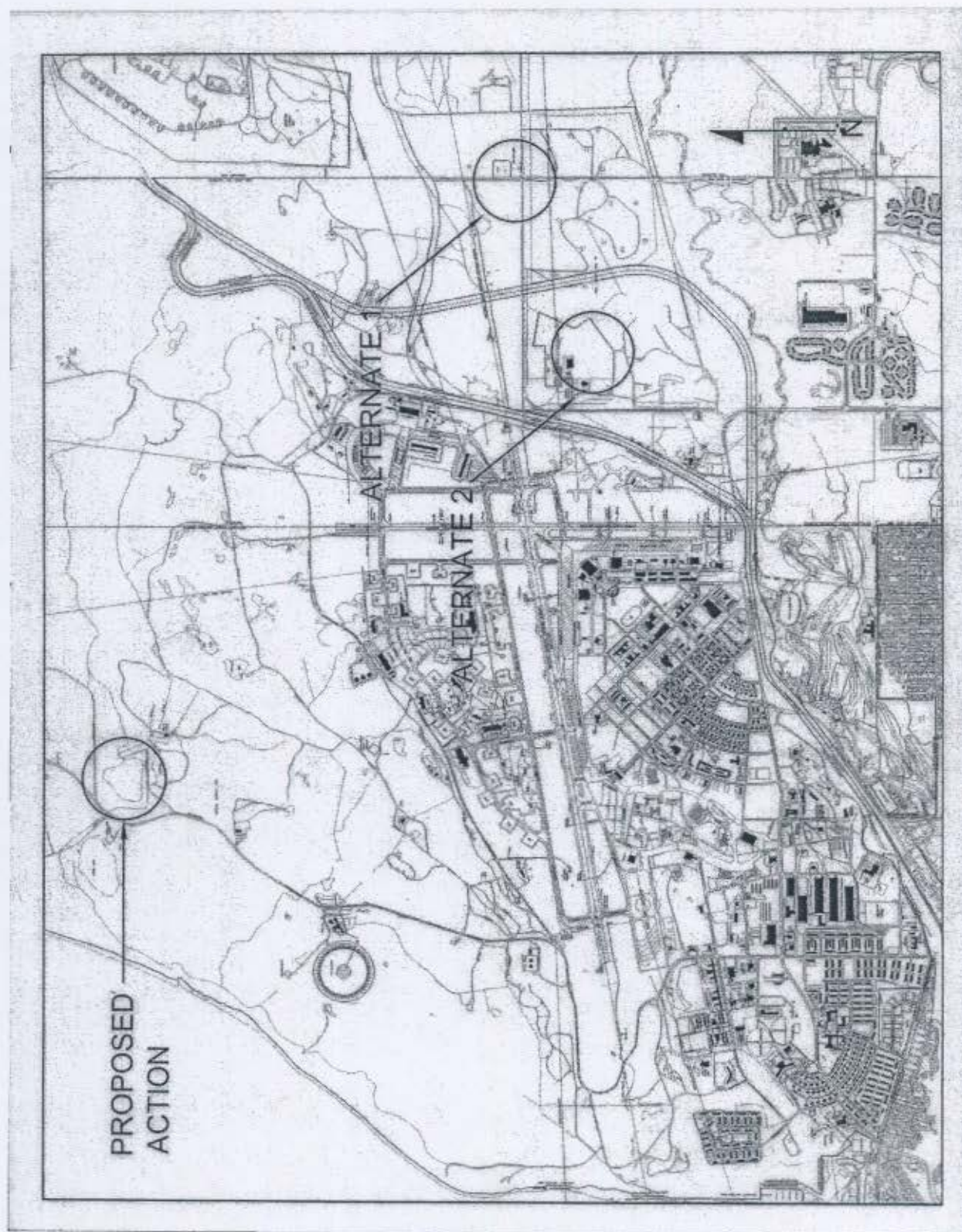
Hazim Yunis, 3 CES/CECCC

SSgt Eric Martin 3, CES/CECS

State of Alaska, Alaska Department of Environmental Conservation, Anchorage

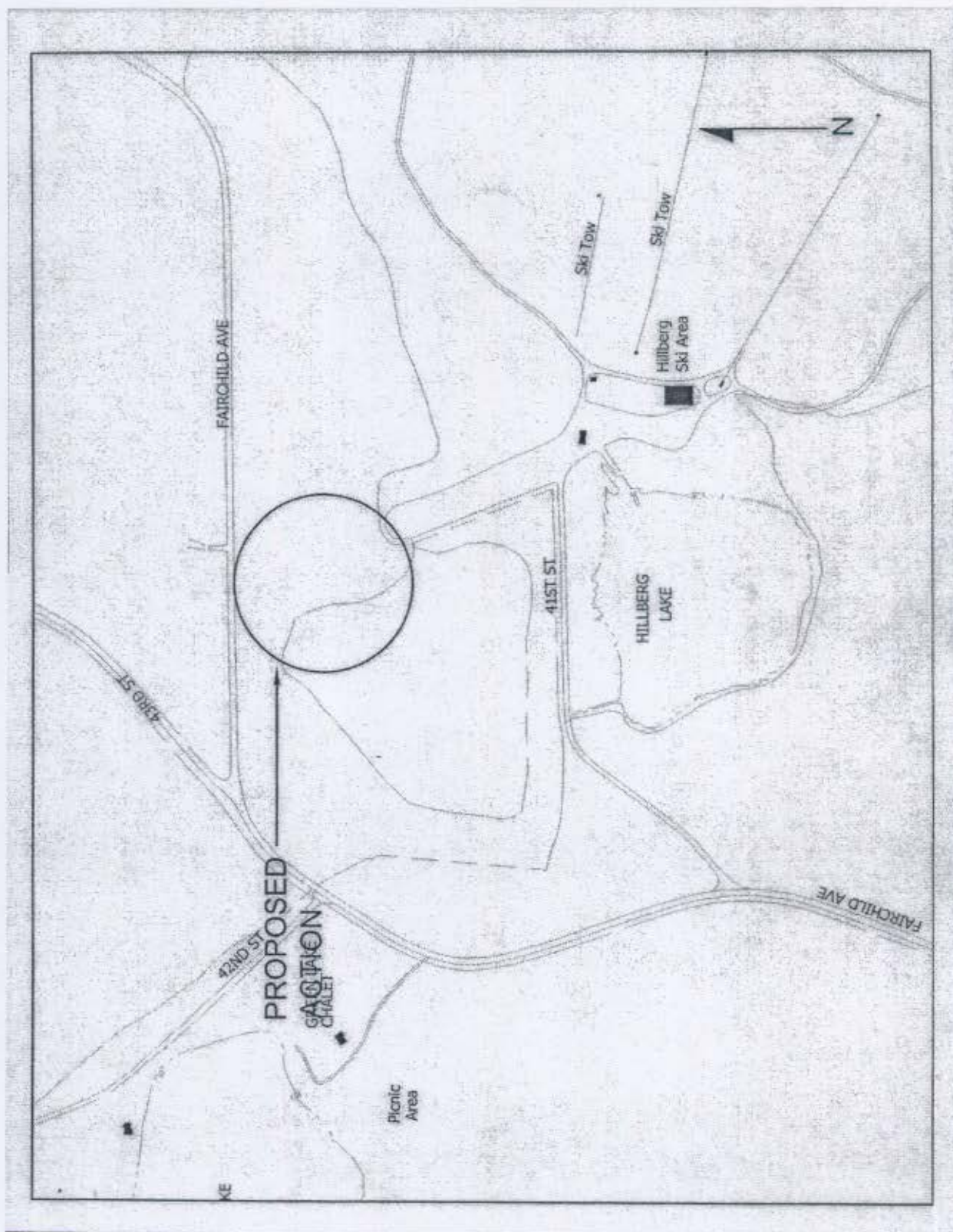


FILE: 2A-1  
DATE: 27 Feb 66  
FILE CODE:  
INITIALS: JF





FILE: 7A-1  
DATE: 27 Feb 66  
FILE CODE:  
INITIALS: JF



## FINDING OF NO SIGNIFICANT IMPACT (FONSI)

FOR

RELOCATE RIDING STABLES

ELMENDORF AIR FORCE BASE

ALASKA

**INTRODUCTION:** The purpose of this proposal is to relocate the Elmendorf Riding Stables to a location near the Hillberg Ski Area. The Elmendorf Riding Stables, in operation since 1959, provides a quality service operation to all active duty, reserve and guard service members, retirees, Department of Defense civilians, and their dependents. Such recreational opportunities contribute to the morale and welfare of base personnel. The present riding stables are located on Truemper Loop off of Arctic Warrior Drive, Elmendorf Air Force Base, Alaska. The area in which the riding stables are currently located is under development for the construction of a new fuel cell maintenance facility for fighter jet aircraft and the future beddown of F-22 aircraft, in support of the 3rd Wing mission.

**DESCRIPTION OF THE PROPOSED ACTION:** Construction would include the clearing and leveling of five acres for the construction of a stall barn, to include 22-12' x 12' stalls, one tack room, one office, 1 supply/equipment room, and one bathroom; fencing for 22-12' x 24' runs (paddocks); one hay storage area; water well and septic system; and 1000' feet of underground electrical to connect to an existing power source. Propane heating would be provided for the bathroom, tack room and office area.

### ALTERNATIVES CONSIDERED:

**Alternative No. 1:** Relocate the riding stables to a location south of the Marine Corps facility on the Elmendorf/Fort Richardson boundary, north of the Davis Highway. This location is also being evaluated for the future expansion of the 3rd Civil Engineering gravel pit west of the proposed site. The Marine Corps also uses this area for training purposes.

**Alternative No. 2:** Relocate the riding stables to a location near the Defense Reutilization and Marketing Office (DRMO) facility at the corner of Vandenberg Avenue and Davis Highway. Recent evaluation of this area has noted the presence of trash cells and soil contamination, and investigation continues in this area.

**Alternative No. 3 - No Action Alternative:** Maintain the riding stables at the current location on Truemper Loop off Arctic Warrior Drive. A service of this type is no longer compatible with the land designations in the area. The area is currently under development for the introduction of F-22 fighter aircraft to the 3rd Wing Mission. As a result, the riding stables will need to be relocated, or operations of the center will have to cease. Failure to relocate the riding stables to a new location would prevent this recreational opportunity from existing for the benefit of the morale and welfare of base personnel.



## ANALYSIS OF AFFECTED ENVIRONMENT:

**Air Quality:** The proposed action and alternatives would have no long-term, significant impact on air quality. There would be some fugitive dust generated during the course of the project, particularly if dry weather is encountered. The fugitive dust would be temporary in nature, lasting only for the duration of the project.

**Water Resources:** The proposed action and alternatives would not have any significant impact on water quality. Elmendorf will coordinate with the State of Alaska, Alaska Department of Environmental Conservation, regarding the plan review and approval of the proposed installation of a domestic water well and septic system. Wellhead protection for the existing drinking water well at Hillberg will be addressed.

**Threatened and Endangered Species:** There are no threatened or endangered species on Elmendorf. The Cook Inlet beluga whale is listed as a depleted species under the Marine Mammal Protection Act. Thus far, there has been no "essential habitat" identified in the vicinity of the mouths of any Elmendorf streams.

**Vegetation Resources:** The proposed action, as well as the other alternatives, would have no significant impact on the overall vegetation composition of the base.

**Fish and Wildlife Habitat:** The proposed action and alternatives could have a negative impact on several species of mammals, specifically black and brown bears and moose. The tendency of penned horses and equine foods to attract bears is likely to create future conflicts that may result in injury or death of a bear and/or horse. If the conflict involves a brown bear, and requires the destruction of the bear, this could have a major impact on local brown bear populations in the area, due to their relatively low numbers. However, this would not have an impact on regional brown bear populations. Loss of a black bear would be a negative impact, but not as major as for a brown bear, due to their larger population numbers. Good housekeeping and sanitation around the stables should be aggressively enforced to minimize bear problems. Monitoring of this potential conflict will be accomplished and evaluated over time. The proposed action and alternatives would have no significant impact on waterfowl populations, neo-tropical migrants, or overall diversity of wildlife on Elmendorf or the surrounding area. The proposed action and alternatives will eliminate forest habitat for black bears and moose and smaller mammals but not at a significant level.

**Historic and Cultural Resources:** The proposed action and alternatives would have no significant effect on any known cultural or historic resources. The probability of an unknown site being discovered in the area of the proposed action and alternatives is low. If any indication of cultural or historical resources were to be discovered during construction, all work would stop and would not proceed until thoroughly evaluated.

**Outdoor Recreation:** The proposed action will necessitate the reorganization of trail uses on base. The trail leaving the proposed site is currently available to all-terrain vehicle (ATV) and snowmachine use, which will conflict with horseback riding. There is also a potential conflict with special



archery hunters in the area of the proposed action. The alternatives would have no additional impact to current outdoor recreational uses.

**Land Status:** The proposed action and alternatives would not alter land status on Elmendorf.

**Remedial Investigations:** None of the alternatives would create an adverse impact on remedial investigations or actions on Elmendorf.

**Environmental Restoration Program:** In 2002, a range survey was completed to document active, inactive, and closed military firing ranges on Elmendorf. Results of the inventory indicate a suspected skeet range located near the Hillberg Ski Area, approximately 500 feet north of the northeast corner of Hillberg Lake, east of the ski area's parking lot. The approximate area of the range is 1.1 acres. According to a 1944 (with shown revisions dated to 1949) plat map, the Hillberg Lake area was a designated recreation area with a skeet range. It is unknown if this skeet range was ever constructed. Aerial photographs were examined, and interviews were conducted, to corroborate the 1944 plat map, however none were successful. A site investigation is planned for the year 2006, to determine if the skeet range did, in fact, exist. The location of the suspected skeet range is not in the immediate location of the proposed riding stables, and no impact is expected to occur.

**Environmental Compliance Contaminated Sites Program:** In October 1988, a release of petroleum product occurred at the Hillberg Ski Area. The spill is believed to have occurred from the fueling hose/nozzle of a 300-gallon aboveground storage tank located adjacent to the ski area maintenance facility, approximately 80 yards north of Hillberg Lake. Approximately 180 gallons of fuel siphoned from the hose into the ground when a fill hose was discovered on the ground next to the tank. Approximately 150 cubic yards of contaminated soil was excavated and removed from the area of the release, and a groundwater monitoring well was installed downgradient between the release site and Hillberg Lake. The groundwater is currently monitored for the presence of contaminants. The location of the spill site is not in the immediate vicinity of the proposed riding stables, and no impact is expected to occur. The proposed action would require provisions if soil contamination is encountered at the project site.

**Air Force Mission:** The proposed action has a positive effect on the base mission, due to the construction of a new fuel cell maintenance facility for fighter jet aircraft, and the future introduction of the F-22 fighter jet and its capabilities to the 3<sup>rd</sup> Wing mission.

**CUMULATIVE ENVIRONMENTAL IMPACTS:** Implementation of the proposed action is not expected to contribute to cumulative adverse environmental impacts at Elmendorf. However, the loss of cover habitat for moose and bears caused by the proposed action and alternative 1 do add to a growing reduction of forested habitat and the species of wildlife that associate with these forest types.

**Wildlife Impacts:** The impact to bears caused by the location of the stables at the Hillberg site may be negative. It is not possible to predict how much of a cumulative impact this action will have, but the conflicts that arise between bears and horse owners will be monitored over time.

**Base Conservation Enforcement/Security Forces:** Patrols through the area of the proposed action are random for both the Military Conservation Agents and security forces; therefore reducing the amount of security coverage the stables has enjoyed at its current location, as well as the amount of coverage that would be received at alternatives 1 and 2. Also, nuisance wildlife conflicts with the stables and the horses will increase at the proposed action site, causing further stress on the horses. The remoteness of the proposed action increases the response time for preventing potential conflicts, relegating the Military Conservation Agent's reacting to after-the-fact incidents.

**CONCLUSION:** Based upon the attached environmental assessment, conducted in accordance with the requirements of the National Environmental Policy Act, the Council on Environmental Quality Regulations, and Air Force Instruction 32-7061, it is concluded that the proposed action, to relocate the Elmendorf Air Force Base riding stables to a location near the Hillberg Ski Area, would have no significant individual or cumulative adverse impacts upon the environment. An environmental impact statement is not required.

**DECISION:** Based on the alternatives considered, the proposed action is the alternative of choice.

19 AUG 03  
DATE

  
DOUGLAS L. MILLER, Colonel, USAF  
Vice Commander